Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for creating a bundle of soft permanent virtual circuits (SPVCs) coupling from ~~form~~ a source end to a destination end via a communications network, ~~said~~ the method comprising:

    creating an SPVC bundle for the source end, the SPVC bundle comprising a plurality of member SPVCs, each member SPVC comprising a permanent virtual circuit (PVC) and a switched virtual circuit (SVC), each of the member SPVCs being associated with a respective connection characteristic and coupling to a same destination; and

    transmitting, from the source end to the destination end, an SPVC setup message containing configuration information of the SPVC bundle, the configuration information comprising bumping rules for individual member SPVCs, the bumping rules specifying to which member SPVC traffic should be bumped when a specific member SPVC fails.

2. (Original) The method in accordance with claim 1, further comprising:

    receiving parameters defining the SPVC bundle at the source end, the configuration information transmitted to the destination end corresponding to the parameters.

3. (Original) The method in accordance with claim 1, further comprising:

    automatically creating, at the destination end, in response to the SPVC setup message, the SPVC bundle for the destination end in accordance with the configuration information.

4. (Original) The method in accordance with claim 1, wherein the respective connection characteristic comprises at least one of:

a quality of service (QoS) parameter; and

a traffic parameter.

5. (Original) The method in accordance with claim 1, wherein the configuration information comprises:

bundle-level parameters; and

parameters for individual member SPVCs.

6. (Currently Amended) The method in accordance with claim 5, wherein ~~said~~ the bundle-level parameters comprises:

network service access point (NSAP) address;

encapsulation parameters; and

address map parameters.

7. (Original) The method in accordance with claim 5, wherein the parameters for individual member SPVCs comprise at least one of:

quality of service (QoS) parameters;

traffic parameters; and

VPI/VCI values.

8. (Original) The method in accordance with claim 7, wherein the parameters for individual member SPVCs further comprise at least one of:

Internet Protocol (IP) precedence levels; and

parameters specifying bumping rules.

9. (Original) The method in accordance with claim 1, further comprising:

    associating each of the member SPVCs with a respective Internet Protocol (IP) precedence

    level.

10. (Currently Amended) The method in accordance with claim 1, wherein ~~said~~ the transmitting

    comprising:

    signaling the SPVC setup message containing the SPVC bundle information using the

    Generic Application Transport information element (GAT IE).

11. (Currently Amended) A method for creating, at a destination network device, a bundle of

    soft permanent virtual circuits (SPVCs) coupling <u>from</u> ~~form~~ a source network device to the

    destination network device via a communications network, ~~said~~ <u>the</u> method comprising:

    receiving and decoding an SPVC setup message containing SPVC bundle information for

        creating an SPVC bundle coupled from a specified source end, the SPVC bundle

        comprising a plurality of member SPVCs, each of the member SPVC comprising a

        permanent virtual circuit (PVC) and a switched virtual circuit (SVC);

    extracting parameters from the SPVC bundle information<u>, the parameters comprising</u>

        <u>bumping rules for individual member SPVCs, the bumping rules specifying to which</u>

        <u>member SPVC traffic should be bumped when a specific member SPVC fails</u>; and

creating the SPVC bundle based on the extracted parameters, each of the member SPVCs

being associated with a respective connection characteristic and coupled from the

specified source end.

12. (Original) The method in accordance with claim 11, wherein the parameters comprising:

bundle-level parameters; and

parameters for individual member SPVCs.

13. (Currently Amended) The method in accordance with claim 12, wherein said the bundle-

level parameters comprises:

network service access point (NSAP) address;

encapsulation parameters; and

address map parameters.

14. (Original) The method in accordance with claim 12, wherein the parameters for individual

member SPVCs comprise at least one of:

quality of service (QoS) parameters;

traffic parameters; and

VPI/VCI values.

15. (Original) The method in accordance with claim 14, wherein the parameters for individual

member SPVCs further comprise at least one of:

Internet Protocol (IP) precedence levels; and

parameters specifying bumping rules.

16. (Original) The method in accordance with claim 11, wherein each of the member SPVCs is associated with an Internet Protocol (IP) precedence level.

17. (Original) The method in accordance with claim 11, wherein the SPVC setup message containing the SPVC bundle information is transmitted using the Generic Application Transport information element (GAT IE).

18. (Original) The method in accordance with claim 11, further comprising:

    allocating a PVC connection and an SVC connection on the destination network device for each member SPVC.

19. (Currently Amended) A network device for creating a bundle of soft permanent virtual circuits (SPVCs) coupling from form a source end to a destination end via a communications network, said the network device comprising:

    an interface adapted to receive commands and parameters to create an SPVC bundle comprising a plurality of member SPVCs, each of the member SPVCs comprising a permanent virtual circuit (PVC) and a switched virtual circuit (SVC);

    an SPVC bundle manager coupled to said the interface, adapted to configure the SPVC bundle in accordance with the parameters, each of the member SPVCs being associated with a respective connection characteristic and coupling to a same destination;

    an SPVC manager coupled to said the SPVC bundle manager, adapted to create an SPVC bundle setup request and SPVC bundle information based on data received from said the SPVC bundle manager; and

a signaling module coupled to ~~said~~ the SPVC manager, adapted to encode and transmit an

SPVC setup message containing the SPVC bundle information, the bundle information

comprising bumping rules for individual member SPVCs, the bumping rules specifying

to which member SPVC traffic should be bumped when a specific member SPVC fails.

20. (Original) The network device in accordance with claim 19, wherein the SPVC bundle

information comprises:

bundle-level parameters; and

parameters for individual member SPVCs.

21. (Currently Amended) The network device in accordance with claim 20, wherein ~~said~~ the

bundle-level parameters comprises:

network service access point (NSAP) address;

encapsulation parameters; and

address map parameters.

22. (Original) The network device in accordance with claim 20, wherein the parameters for

individual member SPVCs comprise at least one of:

quality of service (QoS) parameters;

traffic parameters; and

VPI/VCI values.

23. (Original) The network device in accordance with claim 22, wherein the parameters for

individual member SPVCs further comprise at least one of:

Internet Protocol (IP) precedence levels; and

parameters specifying bumping rules.

24. (Currently Amended) The network device in accordance with claim 19, wherein ~~said~~ the

SPVC bundle manager is further adapted to associate each of the member SPVCs with a

respective Internet Protocol (IP) precedence level.

25. (Currently Amended) The network device in accordance with claim 19, wherein ~~said~~ the

signaling module transmits the SPVC setup message containing the SPVC bundle

information using the Generic Application Transport information element (GAT IE).

26. (Currently Amended) The network device in accordance with claim 19, further comprising:

a connection manager coupled to ~~said~~ the SPVC bundle manager, adapted to allocate a PVC

connection and an SVC connection on ~~said~~ the network device for each of the member

SPVCs.

27. (Currently Amended) A network device for a destination end of a bundle of soft permanent

virtual circuits (SPVCs) coupling from ~~form~~ a source end to the destination end via a

communications network, ~~said~~ the network device comprising:

a signaling module adapted to receive and decode an SPVC setup message containing SPVC

bundle information for creating an SPVC bundle coupled from a specified source end,

the SPVC bundle comprising a plurality of member SPVCs, each of the member SPVC

comprising a permanent virtual circuit (PVC) and a switched virtual circuit (SVC), the

bundle information comprising bumping rules for individual member SPVCs, the

<u>bumping rules specifying to which member SPVC traffic should be bumped when a specific member SPVC fails</u>; and

an SPVC bundle manager adapted to extract parameters from the SPVC bundle information and to create the SPVC bundle, each of the member SPVCs being associated with a respective connection characteristic and coupled from the specified source end.

28. (Original) The network device in accordance with claim 27, wherein the parameters comprising:

bundle-level parameters; and

parameters for individual member SPVCs.

29. (Currently Amended) The network device in accordance with claim 28, wherein ~~said~~ <u>the</u> bundle-level parameters comprises:

network service access point (NSAP) address;

encapsulation parameters; and

address map parameters.

30. (Original) The network device in accordance with claim 28, wherein the parameters for individual member SPVCs comprise at least one of:

quality of service (QoS) parameters;

traffic parameters; and

VPI/VCI values.

31. (Original) The network device in accordance with claim 30, wherein the parameters for

individual member SPVCs further comprise at least one of:

Internet Protocol (IP) precedence levels; and

parameters specifying bumping rules.

32. (Original) The network device in accordance with claim 27, wherein each of the member

SPVCs is associated with an Internet Protocol (IP) precedence level.

33. (Original) The network device in accordance with claim 27, wherein the SPVC setup

message containing the SPVC bundle information is transmitted using the Generic

Application Transport information element (GAT IE).

34. (Currently Amended) The network device in accordance with claim 27, further comprising:

a connection manager coupled to ~~said~~ the SPVC bundle manager, adapted to allocate a PVC

connection and an SVC connection on ~~said~~ the destination network device for each

member SPVC.

35. (Currently Amended) A system for creating a bundle of soft permanent virtual circuits

(SPVCs) coupling from ~~form~~ a source end to a destination end via a communications

network, ~~said~~ the system comprising:

a source network device, comprising:

an interface adapted to receive commands and parameters to create an SPVC bundle

comprising a plurality of member SPVCs, each of the member SPVC comprising a

permanent virtual circuit (PVC) and a switched virtual circuit (SVC), the parameters

comprising bumping rules for individual member SPVCs, the bumping rules specifying

to which member SPVC traffic should be bumped when a specific member SPVC fails;

a first SPVC bundle manager coupled to ~~said~~ the interface, adapted to configure an SPVC

bundle to a specified destination bundle based on the parameters, each of the member

SPVCs being associated with a respective connection characteristic and coupling to a

same destination;

a first SPVC manager coupled to ~~said~~ the first SPVC bundle manager, adapted to create an

SPVC bundle setup request and SPVC bundle information based on data received from

~~said~~ the first SPVC bundle manager; and

a first signaling module coupled to ~~said~~ the first SPVC manager, adapted to encode and

transmit an SPVC setup message containing the SPVC bundle information; and

a destination network device, comprising:

a second signaling module adapted to receive and decode the SPVC setup message

containing the SPVC bundle information; and

a second SPVC bundle manager, adapted to extract parameters from the SPVC bundle

information to configure the SPVC bundle and create the member SPVCs for the

destination end.

36. (Original) The system in accordance with claim 35, wherein the SPVC bundle information

comprising:

bundle-level parameters; and

parameters for individual member SPVCs.

37. (Currently Amended) The system in accordance with claim 36, wherein ~~said~~ the bundle-

level parameters comprises:

network service access point (NSAP) address;

encapsulation parameters; and

address map parameters.

38. (Original) The system in accordance with claim 36, wherein the parameters for individual

member SPVCs comprise at least one of:

quality of service (QoS) parameters;

traffic parameters; and

VPI/VCI values.

39. (Original) The system in accordance with claim 38, wherein the parameters for individual

member SPVCs further comprise at least one of:

Internet Protocol (IP) precedence levels; and

parameters specifying bumping rules.

40. (Currently Amended) The system in accordance with claim 35, wherein ~~said~~ the first SPVC

bundle manager is further adapted to associate each of the member SPVCs with an Internet

Protocol (IP) precedence level.

41. (Currently Amended) The system in accordance with claim 35, wherein ~~said~~ the first

signaling module transmits the SPVC setup message containing the SPVC bundle

information to the second signaling module using the Generic Application Transport

information element (GAT IE).

42. (Currently Amended) The system in accordance with claim 35, wherein ~~said~~ the source

network device further comprises:

a first connection manager coupled to ~~said~~ the first SPVC bundle manager, adapted to

allocate a PVC connection and an SVC connection on ~~said~~ the source network device

for each member SPVC.

43. (Currently Amended) The system in accordance with claim 35, wherein ~~said~~ the destination

network device further comprises:

a second connection manager coupled to ~~said~~ the second SPVC bundle manager, adapted to

allocate a PVC connection and an SVC connection on ~~said~~ the destination network

device for each member SPVC.

44. (Currently Amended) An Apparatus for creating a bundle of soft permanent virtual circuits

(SPVCs) coupling from ~~form~~ a source end to a destination end via a communications

network, ~~said~~ the apparatus comprising:

means for creating an SPVC bundle for the source end, the SPVC bundle comprising a

plurality of member SPVCs, each member SPVC comprising a permanent virtual circuit

(PVC) and a switched virtual circuit (SVC), each of the member SPVCs being

associated with a respective connection characteristic and coupling to a same

destination; and

means for transmitting, from the source end to the destination end, an SPVC setup message

containing configuration information of the SPVC bundle, the configuration information

comprising bumping rules for individual member SPVCs, the bumping rules specifying

to which member SPVC traffic should be bumped when a specific member SPVC fails.

45. (Original) The apparatus in accordance with claim 44, further comprising:

means for receiving parameters defining the SPVC bundle at the source end, the

configuration information transmitted to the destination end corresponding to the

parameters.

46. (Original) The apparatus in accordance with claim 44, wherein the configuration

information comprises:

bundle-level parameters; and

parameters for individual member SPVCs.

47. (Original) The apparatus in accordance with claim 44, further comprising:

means for associating each of the member SPVCs with a respective Internet Protocol (IP)

precedence level.

48. (Currently Amended) The apparatus in accordance with claim 44, wherein said the means

for transmitting comprising:

means for signaling the SPVC setup message containing the SPVC bundle information using

the Generic Application Transport information element (GAT IE).

49. (Currently Amended) A apparatus for creating, at a destination end, a bundle of soft

permanent virtual circuits (SPVCs) coupling from ~~form~~ a source end to the destination end

via a communications network, ~~said~~ the apparatus comprising:

means for receiving and decoding an SPVC setup message containing SPVC bundle

information for creating an SPVC bundle coupled from a specified source end, the

SPVC bundle comprising a plurality of member SPVCs, each of the member SPVC

comprising a permanent virtual circuit (PVC) and a switched virtual circuit (SVC);

means for extracting parameters from the SPVC bundle information, the parameters

comprising bumping rules for individual member SPVCs, the bumping rules specifying

to which member SPVC traffic should be bumped when a specific member SPVC fails;

and

means for creating the SPVC bundle based on the extracted parameters, each of the member

SPVCs being associated with a respective connection characteristic and coupled from

the specified source end.

50. (Original) The apparatus in accordance with claim 49, wherein the parameters comprising:

bundle-level parameters; and

parameters for individual member SPVCs.

51. (Original) The apparatus in accordance with claim 49, wherein the SPVC setup message

containing the SPVC bundle information is transmitted using the Generic Application

Transport information element (GAT IE).

52. (Original) The apparatus in accordance with claim 49, further comprising:

means for allocating a PVC connection and an SVC connection on the destination network

device for each member SPVC.

53. (Currently Amended) A program storage device readable by a machine, tangibly embodying

a program of instructions executable by the machine to perform a method for creating a

bundle of soft permanent virtual circuits (SPVCs) coupling from ~~form~~ a source end to a

destination end via a communications network, ~~said~~ the method comprising:

creating an SPVC bundle for the source end, the SPVC bundle comprising a plurality of

member SPVCs, each member SPVC comprising a permanent virtual circuit (PVC) and

a switched virtual circuit (SVC), each of the member SPVCs being associated with a

respective connection characteristic and coupling to a same destination; and

transmitting, from the source end to the destination end, an SPVC setup message containing

configuration information of the SPVC bundle, the configuration information

comprising bumping rules for individual member SPVCs, the bumping rules specifying

to which member SPVC traffic should be bumped when a specific member SPVC fails.

54. (Currently Amended) The program storage device in accordance with claim 53, wherein

~~said~~ the method further comprises:

receiving parameters defining the SPVC bundle at the source end, the configuration

information transmitted to the destination end corresponding to the parameters.

55. (Original) The program storage device in accordance with claim 53, wherein the

configuration information comprises:

bundle-level parameters; and

parameters for individual member SPVCs.

56. (Currently Amended) The program storage device in accordance with claim 53, wherein

~~said~~ the method further comprises:

associating each of the member SPVCs with a respective Internet Protocol (IP) precedence

level.

57. (Currently Amended) The program storage device in accordance with claim 53, wherein

~~said~~ the transmitting comprising:

signaling the SPVC setup message containing the SPVC bundle information using the

Generic Application Transport information element (GAT IE).

58. (Currently Amended) A program storage device readable by a machine, tangibly embodying

a program of instructions executable by the machine to perform a method for creating, at a

destination network device, a bundle of soft permanent virtual circuits (SPVCs) coupling

from ~~form~~ a source network device to the destination network device via a communications

network, ~~said~~ the method comprising:

receiving and decoding an SPVC setup message containing SPVC bundle information for

creating an SPVC bundle coupled from a specified source end, the SPVC bundle

comprising a plurality of member SPVCs, each of the member SPVC comprising a

permanent virtual circuit (PVC) and a switched virtual circuit (SVC);

extracting parameters from the SPVC bundle information, the parameters comprising

bumping rules for individual member SPVCs, the bumping rules specifying to which

member SPVC traffic should be bumped when a specific member SPVC fails; and

creating the SPVC bundle based on the extracted parameters, each of the member SPVCs

being associated with a respective connection characteristic and coupled from the

specified source end.

59. (Original) The program storage device in accordance with claim 58, wherein the parameters

comprising:

bundle-level parameters; and

parameters for individual member SPVCs.

60. (Original) The program storage device in accordance with claim 58, wherein the SPVC

setup message containing the SPVC bundle information is transmitted using the Generic

Application Transport information element (GAT IE).

61. (Currently Amended) The program storage device in accordance with claim 58, wherein

said the method further comprises:

allocating a PVC connection and an SVC connection on the destination network device for

each member SPVC.